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VOL. XII. NEW SERIES. No. 3.

MARCH, 1903.

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# THE OPHTHALMIC RECORD

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PUBLISHED ON THE FIFTEENTH OF THE MONTH.

SUBSCRIPTION RATES: IN THE UNITED STATES, CANADA, AND MEXICO, $4.00 PER ANNUM, IN ADVANCE. OTHER COUNTRIES OF THE POSTAL UNION, 18 SHILLINGS.
SINGLE COPIES 50 CENTS.

THE OPHTHALMIC RECORD,
THE HIGH BUILDING, CHICAGO, U. S. A.

Entered at the Chicago Post-Office as second-class matter. Rogers & Hall Co., Printers, Chicago.

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The April number of THE OPHTHALMIC RECORD will contain a report of the proceedings of the Western Ophthalmologic Association; an original article by Albert B. Hale, M. D., "Confessions of a Traveler;" one by George T. Brady, M. D., "Mucocele of the left inferior Lachrymal Canaliculus;" one by H. E. Peterman, "Glaucoma Malignum;" report of a case with recovery of vision; one by H. Moullon, M. D., "Two cases of Amblyopia from non-use in Cataract dating from Childhood;" one by Geo. F. Suker, M. D., "Paralysis and Paresis of Muscle of Accommodation."

There will also appear Reviews, Abstracts, Society Reports and Personals, and Items of interest to the profession.

THE RECORD particularly desires short practical papers on any subject connected with Ophthalmology. These will be published at as early a date as possible. It is understood that, unless otherwise arranged, original articles, when accepted, are contributed to the RECORD exclusively. Illustrative cuts will be made at the expense of the journal, and proofs for correction will be sent to authors when desired. Reprints with covers will be furnished at cost. The RECORD will be issued monthly, and each number will contain about 54 pages of reading matter.

Address all communications relating to Editorial Department to

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**103 E. Adams Street, CHICAGO.**

**Subscriptions and Advertisements should be sent to the Publisher, The High Building, Chicago, Ill., U. S. A.**

**Sole Subscription Agents for Great Britain, J. RAPHAEL & CO., 51 Clerkenwell Road, London, E. C.**

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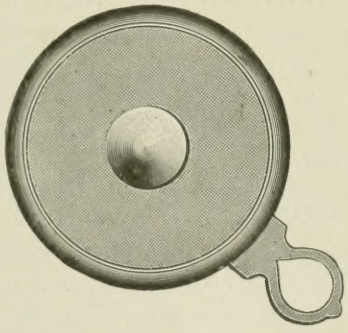

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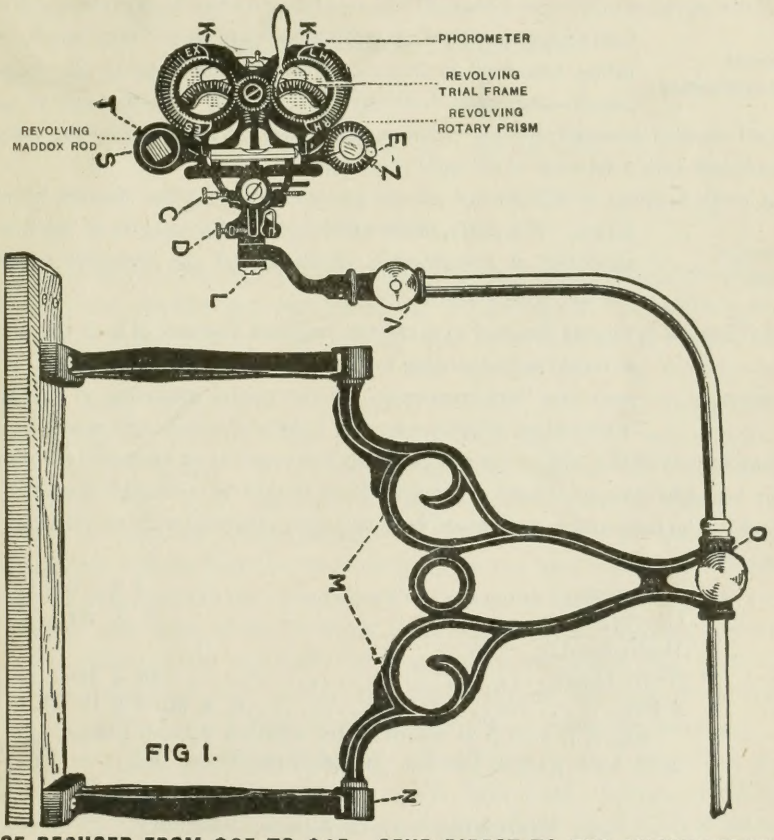


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# OPHTHALMIC RECORD

A MONTHLY REVIEW OF THE PROGRESS
OF OPHTHALMOLOGY.

VOLUME XII. No. 3. CHICAGO, MARCH, 1903. NEW SERIES.

## ORIGINAL ARTICLES.

### CONFESSIONS OF A TRAVELER.

BY ALBERT B. HALE, M. D., CHICAGO.

Illustrated.

Germany, north and south, with its twenty universities, probably offers to the student the essence of our knowledge of ophthalmology, but it does not follow that all the best men are to be found at the universities, nor that those at the universities are necessarily the best men. They are the teachers, however, and their equipment as teachers or as illustrators of what they teach, is unsurpassed. I say this to advise the traveler or student against the idea that he should visit only the universities if he wishes to obtain an epitome of German ophthalmologic life, or that only at the largest universities will he find the best teaching or the best material. Hamburg, Wiesbaden, Köln, Düsseldorf, are names with which we are familiar, and here there is work done apart from teaching, while in such cities much, especially of a practical character, can be seen as an example of how active ophthalmology is, or how soon the teaching at the universities becomes applied in general experience.

It was my privilege this last summer to visit both kinds of kliniks, and I have tempted the good nature of readers of THE RECORD by giving them a few facts in regard to what I have seen, and shall end my narrative by an essay to criticize from my observations and to compare American with European methods without injustice to either side.

#### HAMBURG.

This gateway for nearly every traveler entering Germany, is a beautiful, well-built and attractive city of nearly 700,000 inhabit-

ants. It has no university and consequently does comparatively little teaching although opportunity is not lacking. Its chief interest is commerce, manufacturing being subordinate, and consequently its clinical material is more in the line of diseases than of accidents. Undoubtedly the best place to visit today is the new hospital at Eppendorf which serves as the Hamburg General Hospital. It lies on the outskirts about 30 minutes' ride by trolley from the center of the city, but thither are brought nearly all the sick and injured to get the advantages of better and quieter surroundings. There are six large, separate buildings for medical, surgical, gynecological cases, for infectious, children's and eye diseases, arranged on the pavilion plan and covering several acres of ground. The Eye Hospital has 150 beds in its three departments for men, women and children. The Director is Doctor Mannhardt who comes daily from Hamburg to make visits about 9:30 in the morning. The resident surgeon is Doctor Treutler who recently resigned an assistantship under Hess at Würzburg. No direct teaching is done here but the material is extensive enough to furnish study for anyone. The character of the diseases is largely that of depressed vitality and infections—conjunctivitis, keratitis (especially among children) fundus anomalies and the usual proportion of cataracts. One can, if one stays long enough here, watch with profit the influence of general and local treatment combined with hospital regime. Of particular interest was Treutler's remark that he at once submitted practically all children with inflammatory conditions to a thorough scraping of the throat and even excision of the tonsils, if indicated. Since doing this, he finds that a child recovers in probably half the time previously required, and he has now adopted the method as a routine.

There is no poliklinik (outpatient department), though one may be established. The equipment for operations, examinations and record keeping, is complete, and estimations of refraction are done carefully and systematically with the retinoscope.

KIEL.

Kiel, with about 100,000 inhabitants is the nearest University for the student entering through Hamburg, and since the establishment there of the Imperial Navy Yards and the construction of the North East Sea Canal, the city has grown rapidly in importance. As it was here that I served my assistantship, I may be pardoned if I think lovingly of the city and the eye hospital there. The city itself is best seen in the early summer, when society frequents it for

# ILLUSTRATIONS

MENTIONED IN ARTICLE BY ALBERT B. HALE.

Fig. I. EYE HOSPITAL, HAMBURG (EPPENDORF).

Fig. II. UNIVERSITY EYE HOSPITAL, KIEL.

the yachting in the harbor, the baths, and to escape the depression of the inland heat. Professor Voelckers is the ordinary professor and chief of the hospital, Doctor Rehr, who has been with him over fifteen years, the first assistant. The Eye Hospital is close to the University building and the other kliniks so that the visitor can see the work of several departments in one day. It has sixty beds (but more can be accommodated if necessary) generally fully occupied, and there are from five to fifteen new, twenty to fifty old cases in the out patient department, daily. With the recent influx of laborers one sees here a greater number of trachoma cases than would be expected in West Germany and as Professor Voelckers has an enviable reputation throughout Jutland and the adjacent Danish Islands, the number of operations and unusual cases is interestingly large. Ward visits are made at 9:30 a. m., the new cases examined from 11 to 12, old cases treated from 12 to 1, a clinical lecture is held from 1 to 2, and class operations thereafter. Other operations are arranged at the convenience of the operator, usually, however, after 12 and before 3. The operating room is small but well appointed, although in comparison to the amount of work done here, or with more pretentious kliniks elsewhere, it is modest. A specialty at Kiel is the extirpation of the tearsac, which is performed with perfect art. Plastic operations on the lids are quite usual, and as Professor Voelckers is an advocate of early and deep discission, the dislacerated lens offers an abundant field for study. Few foreigners come to Kiel and the instruction is mostly for undergraduates, so that the experienced practitioner would enjoy chiefly the rare cases in the wards, the delicacy of the operative work and the undisturbed routine of hospital treatment. In fact, all Kiel is conservative, and thoroughness is more the keynote than experiment. Perhaps as great a departure as any from orthodoxy is Professor Voelcker's advocacy of canthotomy is nearly all cases of conjunctival or corneal inflammations especially in children; this he performs with one stroke of the scissors and only one (central, horizontal) suture.

BERLIN.

It is out of the question to try to discuss Berlin with any thoroughness. Its 2,000,000 inhabitants furnish a vast amount of clinical material that is exhaustively utilized, but the city is too large and the kliniks too scattered for the traveler to get the best use of it, so he must pick and choose what he thinks will attract him most. There are so many well-known men at work there, with nearly the same independence that characterizes American ophthalmologic

activity, that a residence of several months would be necessary to acquaint oneself with even the best, and I must therefore confine myself to what I know is of general interest.

The center of medical life is the Karlstrasse, at one end of which can be found the Charité with Professor Greef, at the other, in the Ziegelstrasse, the University Hospital with Professor v. Michel, but recently removed here from Würzburg to fill the vacancy created by the retirement of Schweigger; between them lie the klinik of Professor Hirschberg (semiprivate) and that of Professor Silex so long the energetic assistant to Professor Schweigger. There are other good men in other parts of the city, but they are not accessible without special effort.

Without disrespect to the charité I shall pass this klinik by, merely mentioning the splendid opportunity offered there for pathologic study, for Greef is better known as a pathologist than as an operator. Hirschberg is justly proud of his operative skill and his operating room, and of course anyone interested in the magnet or the controversy concerning it, should not omit seeing the klinik, but the material is of a semiprivate character and as a place in the small operating room is so eagerly sought by foreigners and Germans, and as there are so many assistants and attendants, close contact with Hirschberg is difficult to obtain.

v. Michel left Würzburg just before the completion of the beautiful new hospital there, and he is putting into effect in Berlin the ideas he practically established during his South German professorship. His domain forms part of the large rectangular structure (the University Hospital) containing wings for the various departments. On passing through the common entrance, one may go to the left to v. Bergmann's klinik, or to the right, in front, to the Eye Hospital. There are at present sixty-five beds, to which more will be added so soon as alterations are completed. The operating room is modest but satisfactory; many operations are performed in the ward beds. The ambulance klinik is enormous and requires the utmost effort of ten and sometimes more assistants to handle it. They received last year 16,000 patients! Work in the poliklinik is rather hurried and the stranger must look after himself or be forgotten, though not from any discourtesy so much as from the crowded condition of the rooms. Patients are received here at any time from 9 to 11:30, but about half past ten it is busiest. Visits are made from 10 to 12. Professor v. Michel lectures from 12 to 1, in a familiar hearty way that attracts students. He generally has

Fig. III. SILEX (AND JANSEN) HOSPITAL, BERLIN.

Fig. IV. SILEX (AND JANSEN) POLIKLINIK, BERLIN.

three or four cases of a somewhat similar character and demonstrates them one after another. He then discusses the pathology at greater length, but does not lay much stress upon treatment. This discussion is followed by illustrations of both gross and microscopic conditions, with photographs and sections used in the dark lantern (projection apparatus), after which the students are invited to examine the actual specimens under the microscopes which are arranged (a dozen or more) conveniently on nearby ledges. Operations may be performed either before, during or after the lecture, according to v. Michel's wish, and it is wise for the visitor to inform himself the day before of the hour selected, or he may not be on time.

v. Michel is in many ways an iconoclast and has delighted in destroying some ophthalmologic traditions that are still alive in other parts of the world. One finds this out by a tour through the wards. After cataract operations, for instance, a binocular bandage is worn for only 24 hours, and thereafter only a monocular or perhaps a simplified Fuchs wire screen. Patients are not kept confined to bed —in fact they may frequently sit up at once after the operation, and make themselves comfortable. The dark room is abolished, as he will have nothing to do with the prison system that so long characterized the eye hospital. He has also developed an earlier feature of the roof garden for every ward—especially for the children, and patients are thrust into fresh air as soon as possible. One often sees there groups of patients cheerfully discussing their ills, in pleasant contrast to the ward life to which most inmates of large city hospitals are restricted.

Undoubtedly as interesting a klinik as any in Germany, because the American sees in it the same restrictions he so often meets at home, is Professor Silex' Poliklinik at 29 Karlstrasse, and next door to it, where most of the operating is done, the small hospital conducted by a Catholic Sisterhood. Silex is extraordinary professor, and as such he does not find his opportunities ready made for him. He has succeeded remarkably well, however, in making them for himself and has as extensive a material as the visitor can assimilate in many a day. He operates early in the morning (from 8:30 or 9 till 10 or 11, according to the amount of work), then attends to patients in the wards and comes afterwards to the laboratory to study and work till it is time to see outpatients, 11:30 to 1. If he lectures, it is from 1 to 2. The operating room is small, scarcely accommodating six persons, and the equipment is of the

simplest, but the results are worth the emulation of anyone with a model hospital back of him. The hospital was not built for such, being simply two large "flats" thrown together, one side being used by Jansen for his ear, nose and throat patients, the other by Silex for the eye. Silex controls about 32 beds, but his operative work ranges over all ophthalmology. The Poliklinik also was the usual German (Wohnung) apartment, adjusted to its present use. At the back is Dr. Pollack's laboratory, unpretentious enough, but vastly interesting if one has the entreé. There is real work done here by a master, as all cases in both Hospital and Poliklinik wait the final diagnosis of the microscope. Dr. Pollock gives private instruction and demonstrations both to Germans and foreigners (he speaks several languages) and his collection of specimens, so dear to the American student, is extensive.

Work in the Poliklinik seems hurried—as at home—but someone is always extracting meat from the cocoanut, and when the report is ready, the traveler will find abundance to satisfy his appetite. It would seem to me that the American would feel more at home, would see more and learn more by a short course under Professor Silex and Dr. Pollack than anywhere else in Berlin. Others may differ from my opinion, but there is this advantage here obtainable no other place, one that appeals directly to every student going from the United States, that in the same building with Silex—the eye—is Jansen—ear, nose and throat—that is, one can find the two specialties in general and very interesting proximity.

### BRESLAU.

Breslau, with more than 400,000 inhabitants, lies off the beaten track of the tourist, five hours' by express to the southeast of Berlin, about six hours' east of Dresden. It is therefore seldom visited by the ordinary traveller and retains much of its quiet, easy-going German contentment. Its occupations are largely commercial and it has no intense social or court life to fascinate the visitor. There is plenty to see there, however, and anyone wishing to get a good taste of a German city still uninfluenced by Baedakerism, can be well repaid by a few days in clean, well-built, wholesome Breslau; there is enough outside of the medical life pleasantly to occupy that part of several days not devoted to hospitals.

Breslau is a fascinating name in ophthalmology. Much of the best work has been done there. I need mention only such names as Foerster, who died last spring, Magnus and Cohn who are yet active and honored men, to show wherein we are indebted to her.

Fig. V. UNIVERSITY EYE HOSPITAL, BRESLAU.

Fig VI. WOLFFBERG'S EYE KLINIK, BRESLAU.

Today, however, we think first of the new hospital in the Maxstrasse and its Chief Professor Uhthoff with his first assistant, Doctor Heine. The old University* lies not far from the center of the city and is a well built but rather gloomy structure surrounded on three sides by a muddle of houses, while the fourth side lies open to the river Oder. The city and the German educational authorities have, however, here, as in other instances, been farsighted enough to plan for an extensive future and have removed the medical center nearly two miles out from the University in a quite new and unbuilt edge of the city, on the banks of the Oder. Following by trolley the Thiergartenstrasse just before we come to the bridge over the river is the Maxstrasse, which might better be called the hospital street, since it is nothing but hospitals from one end to the other, all new, modern, scientific and practical. Within a minute's walk of each other one may find Mikulicz, Neisser, Kümmel, Czerny, and Uhthoff in that building first on our left, the New University Eye Hospital.

It is worth a trip to Breslau and back to see what the German Government is doing for Ophthalmology, scarce fifty years since Graefe was refused separate beds for his patients in Berlin and had to content himself with barrack-like accommodations for his own special cases. I know of only one word—magnificent—to express the opinion, not alone of this building built in an attractive and a uniform architecture to the others, to be sure, but of its scientific equipment and appointment for examination, treatment and teaching. The klinik was opened about three years ago, it having cost 258,000 marks ($64,250.00) and can accommodate at least 70 patients, men, women and children.† Here one sees an immense variety of cases, inflammatory, degenerative and operative. The Ambulant Klinik is equally interesting, as one can watch here the history taking, the first application of treatment, the reception into the hospital or the daily treatment of those who either do not need resident service or have been discharged from hospital to return occasionally as the case may require. There are in residence three official assistants of whom Dr. (*Docent*) Heine is the head, but in reality there are a dozen volunteers all German or foreign, and when

* University in German parlance means what we might call the Administration building; when we ask where some particular work is done, we must specify, as, for instance, the University Library, the Chemical Laboratory, or the University Eye Hospital, for they may be, as in Berlin and Strassburg, they are separated by a mile or more from each other.

†Uhthoff's report Klinische Monatsblätter, August, 1901.

I was there the Japanese seemed enthusiastically to have grasped the opportunity to serve in such commodious quarters under a man who is fast becoming known as one of the best teachers in Europe. Visits are made through the wards at 10 a. m.; at about 11 the new cases (10 to 20 daily) are seen by Professor Uhthoff and Dr. Heine first, then after a tentative diagnosis these are turned over to the assistants for a careful examination which includes written histories, pathologic conditions, laboratory findings, visual tests and often field of vision and color sense charts. At 12 the old ambulant cases (30 to 50 daily) are admitted to be treated by Dr. Heine, while at this time many ward cases come to these rooms for further examination. At 1 p. m., during the semester Professor Uhthoff lectures and demonstrates for an hour or more selecting his cases with care and with effort to carry the student systematically from one disease to the other. Operations are usually done after this, but may take the place of demonstrations. The projection apparatus, the microscope and other scientific models, charts or instruments are freely used, while photography plays a decided part in history taking and in teaching. A feature of Heine's work well worth studying are his photographs and stereoscopic views, and his collection of x-ray pictures adjusted for the simple hand stereoscope. Many details hard for the student to understand are thus brought out with exquisite detail; the relation of the brain to the cranium, for instance, or the degree of cupping in chronic glaukoma; and although some of these have already been published in the Atlas series of Neisser (J. Ambrosius Barth), it is a treat to have looked at the originals.

The hospital is beginning to have an unusual number of cases of conjunctival tuberculosis and especially of lupus around the eye, because, due to Neisser's reputation in the Skin Hospital across the Maxstrasse, patients are coming from far and near to submit themselves to treatment. I was surprised not to find a rich harvest of trachoma here, as I fancied that this extreme eastern location, *i. e.*, its proximity to Poland, would make the percentage of this disease unusually high, but I think that one must go to Königsberg (Kuhnt) in the North, to see this proteon disease in full bloom.

But the visitor must not be satisfied with this one klinik in Breslau. There is a fine hospital of the Barmherziger Brüder conducted by Dr. Meyer, formerly an associate of Heine's, and a very interesting private klinik under the care of Dr. Wolffberg, the editor of that delightful little Wochenschrift für Therapie und Hygiene des Auges. This lies at 9 Frieburgerstrasse at the extreme opposite

# ILLUSTRATIONS

MENTIONED IN ARTICLE BY EUGENE RICHARDS LEWIS.

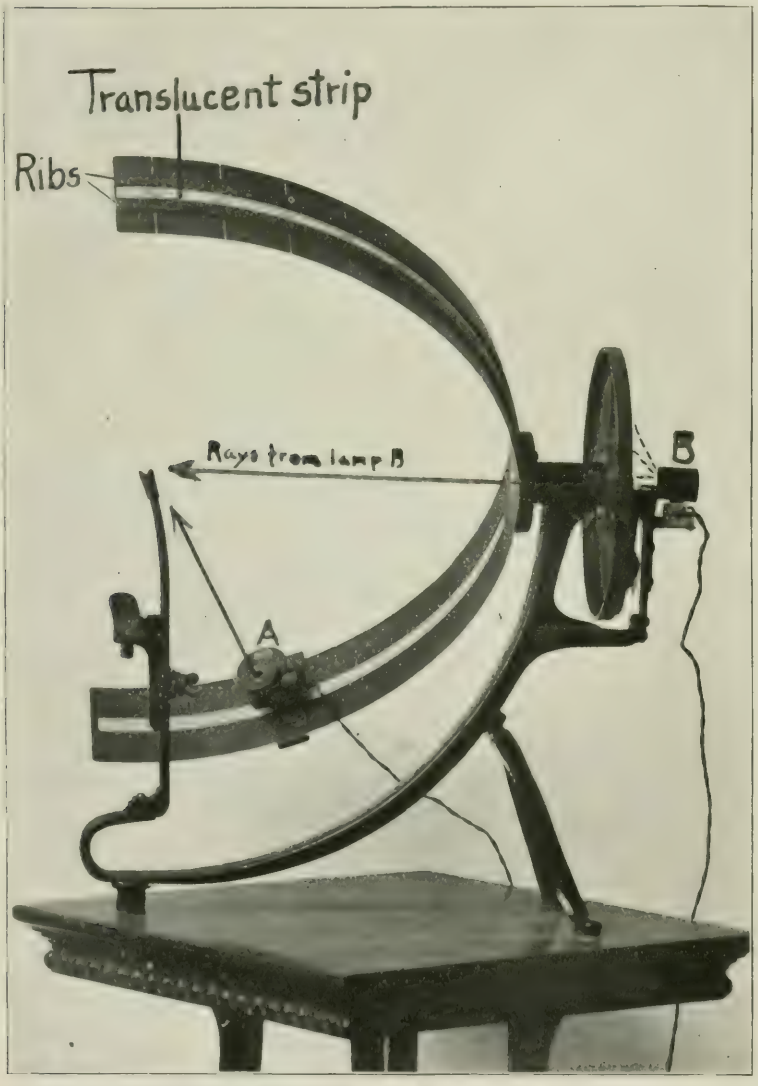


Fig. 1.

side of the town from the Maxstrasse, and has been in existence for years even before Dr. Wolffberg took charge of it. There is no connection between the University and this klinik, which adds to its interest because it is not a teaching center but an example of that large and admirable class of kliniks seen in many cities, where men fully abreast of the times act perhaps in a more personal way than do the professors. In fact the work here reminded me of our own American methods and the obstacles are just such as we meet in our own practice. Wolffberg is a practical man—a sporadic case of Americanism—keen to have everything systematized and in order, always devising a new or neater dressing, trying new drugs (dionin, for example), readjusting himself continuously to his environment, scientific yet dissatisfied with the present if he can devise something better for the future. One sees here individual patients rather than material, and hears complaints in detail just as we hear them at home, and finds that Germans have dislikes and discomforts even as have Americans, a condition often forgotten when we see the military discipline of a large public German hospital. His patients come to a noticeable extent from the Mutual Aid Societies who subscribe for hospital or dispensary service, and all sorts of cases are seen, acute and even chronic, where it is hoped that some skill of the surgeon may, by patient persistence, improve vision disturbed by an acute inflammation.

Wolffberg sees his patients chiefly from 10 to 12 in the morning; he controls about 30 beds, but as his clientele is chiefly private, there is no close distinction between hospital and ambulant cases, and they appear in a common group in the treatment room, or as he may individually summon them.

(To be continued next number.)

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## A MODIFICATION OF THE PERIMETER, WITH ELECTRIC TRANSILLUMINATION OF THE MIRES.

EUGENE RICHARDS LEWIS, M. D.,
DUBUQUE, IA.

Illustrated.

For the past year I have had in use a modified Hardy perimeter, the mires of which are transillumined (Fig. 3). Recently I have made some improvements upon the instrument as I had been using it. A description of the improved instrument is as follows. (Fig. 1.)

The movable mire carries a 1 candle power incandescent lamp

fitted within a brass cylinder (Fig. 1-A). (The lamp is easily removed, by slipping off the cylinder base which bears the lamp. This allows changing the lamp in case it burns out.) The cylinder is so placed upon the mire that only two pencils of rays are allowed emission, one going to the patient's eye, the other (Fig. 2, rear view) passing directly backwards upon the perimeter arc. The rays which go to the eye of the patient pass through one of four ground glass discs which are so placed upon a rotating wheel that any one, red, blue, green, or white, can be swung into the pencil of rays, according to the desire of the observer. (Fig. 2.)

The size of the pencil of rays is regulated by an iris diaphragm. (Fig. 2.)

In the middle of the arc throughout its entire length except for a few degrees on each side of the fixation point, the brass is cut away to give place for a translucent strip of celluloid upon which the degrees of the arc are marked (Fig. 1). The second pencil of rays emanating from the brass cylinder, which have been spoken of as passing directly backwards upon the perimeter arc, serve to transillumine this celluloid strip for making the readings during perimetry. (The instrument is used in the dark room.) The celluloid strip is held in place by two ribs (Fig. 1), one on each side, which incidentally serve to strengthen the arc, and which more than supply what loss of rigidity may have been entailed by the removal of the brass down the middle of the arc to make place for the strip of celluloid.

The fixation mire, at the center of the arc, is transillumined by a second incandescent lamp upon a bracket at the back of the instrument. (Fig. 1, B.)

In the Hardy perimeter there is a tubular opening directly through the axle from the center of fixation to the center of the chart. The second incandescent lamp is so placed at the rear (or chart) end of this tubular opening that some of its rays pass to the patient's eye through the tubular opening, while others of its rays illumine the chart of the field as it is in position on the instrument. (Figs. 1 and 3.) By means of a brass hood (Fig. 3) fitted over this lamp all rays are shut off except those going to the patient's eye and those illuminating a circular area upon the chart, which area is sufficiently large to permit recording the readings. A piece of translucent material (I use bond paper) should be pasted over the center of fixation to soften by diffusion the direct rays from lamp to eye.

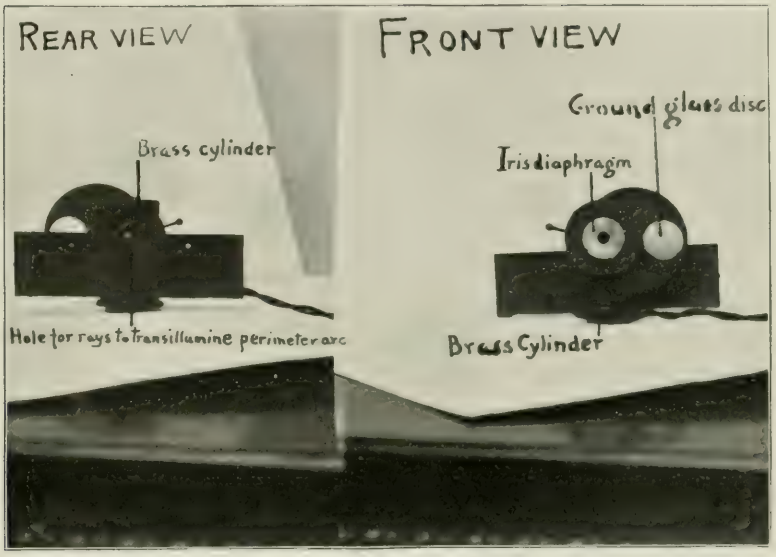


Fig. 2.

Fig 3.

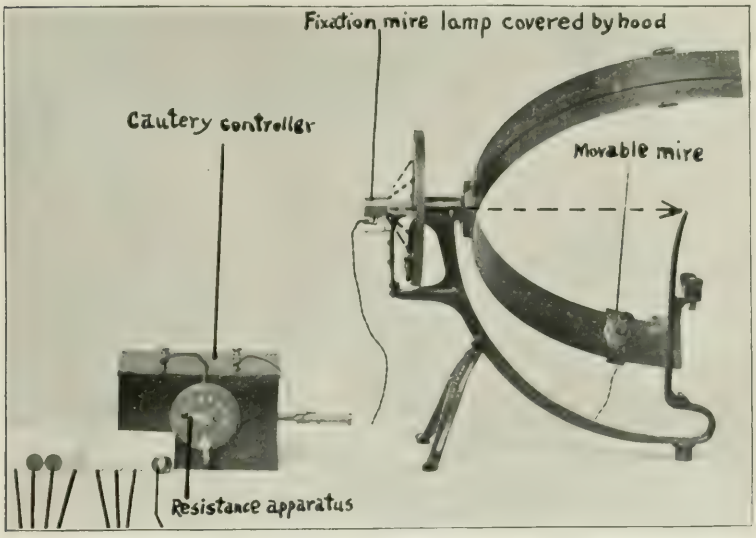


Fig. 1B.

Fig 1A.

In the dark room it is impossible for the patient to see anything at all except the two transillumined points, and no such subjective errors occur as mistaking the observer's finger tip, or a brightly reflecting point on the surface of the arc, etc., for the movable mire in the periphery of the field.

By means of a current controller (an ordinary cautery controller) the intensity of illumination can be varied, from the faintest glow to white incandescence. This, however, in my opinion, is inadvisable, as I believe that one of the chief advantages of using artificial rather than solar illumination is the obtaining of an absolutely uniform intensity of retinal stimulus, both for light and for color perceptions. By making use of the dark room and artificial illumination, the observer is independent of the variations and limitations of daylight. One of the advantages of the instrument is the improvement over the candle method of taking the field of light projection in cataract cases. It is also well adapted to measuring the angle of a squint. The field for white and the color fields are found to be somewhat larger, measured by this instrument, than as measured by the reflected light method now in use. In marking the limits of a scotoma, much greater accuracy of definition can be obtained by using this instrument than by using the mire illumined by daylight. This is particularly noticeable if the iris diaphragm is nearly closed and the room is in absolute darkness.

Though the instrument has not been in use long enough to justify making any great claims for superiority, I believe that, in the respects mentioned, transillumination is an improvement over illumination by reflected daylight, and should be of interest to ophthalmologists.

1110 MAIN STREET.

NOTE.—I am now having made two insulated copper strips for the purpose of doing away with the cord which carries the electricity to the lamp on the movable mire. By this change the electricity will be carried to the moving lamp through two friction contact springs and the two insulated strips.

Fig. 3 shows the instrument as it was before the improvements were made. The ground glass discs and diaphragms were held in place over the end of the brass cylinder of the movable mire by the cap fitting over the cylinder. The arc was not transillumined and readings were made by turning on a portable incandescent lamp.

# CHANGES IN REFRACTION.*

BY S. D. RISLEY, M. D.

Attending Surgeon Wills Eye Hospital, Philadelphia.

In my early experience I had come to believe that, except in the presence of certain more or less well defined pathological conditions, the static refraction of an eye was a fixed or practically immutable quantity. That is to say that where hypermetropia with or without astigmatism, was demonstrated under a rigid paralysis of the accommodation, that later measurements made in the same manner would demonstrate the same static refraction as was found in the first examination. In the routine of practice, when recorrections of ammetropia after the lapse of time were for any reason found necessary and a change in the refraction was found, *i. e.*, an increase in the hypermetropia, a diminution or an increase in the amount of astigmatism or a required change in the direction of the axis of the correcting cylinder, I invariably ascribed the change to an error in my first determination. It is probable that many ophthalmic surgeons, myself among the number, are still prone to explain the marked changes which must often be made in the correcting glasses made by a colleague, to careless or inaccurate work. The purpose of this study is to show that this is not necessarily true and that therefore we should view with a broader charity both our own earlier work and that of others working in the same field. I still believe that in the vast majority of instances no change occurs in the static refraction of healthy eyes but that there are numerous exceptions to this rule cannot be open to question. In the following remarks the many interesting and important problems which cluster about the myopic eye and the increase of refraction in the hypermetropic, will be rigidly excluded from consideration, and only those changes noted which, on any conceivable theoretical consideration, do not involve a stretching or distention of the ocular tunics.

The following cases are chosen to illustrate the character of changes had in mind.

Case I. Dr. X. Aet. 38. *Asthenopia*, was carefully corrected under atropia instilled three times daily continued for several days and received the following formula for glasses:

O. D. $+1.00 \bigcirc + 0.62$ c. ax. 75°, V = 6/V1.

O. S. $+1.00 \bigcirc + 0.62$ c. ax. 105°, V = 6/V1.

The asthenopia was entirely relieved and the glasses worn for five

*Read before the Section in Ophthalmology of the College of Physicians of Philadelphia, February, 1903.

years with perfect comfort. There was then a return of the asthenopia, the symptoms being confined to the left eye. A second careful study, also under a mydriatic, found it necessary to place the axis of the cylinder in the left eye at 135°, the strength of the glass remaining the same. No change in the right. Two years later it was found necessary to change the axis of the right cylinder to 60° and the left to 165°. A year later the axis in the right eye was placed at 45°. He is still wearing after eight years + 1.00 ⊃ +.62c, the axis in the right at 45° in the left at 165° with perfect comfort. At no time was there any demonstrable disease to account for the change and no loss in the acuity of vision.

Case II. Dr. T., a busy rural practitioner, Aet. 35, came to me in 1886, suffering from impaired vision and severe asthenopia frequently culminating in attacks of sick headache after a day spent in driving over the hot and dusty roads in the country. There was well marked retinochoroiditis at the macula in each eye which accounted in part for his impaired vision. After prolonged mydriasis, with potassium iodide and bromide internally, the intraocular conditions improved and vision rose to nearly normal acuteness with + 1.50 c. ax. 90° for each eye. This glass was worn with complete comfort and satisfaction for about five years. He then came complaining of discomfort and indistinct vision with his glasses. A second mydriatic correction gave normal vision with + 1.50 sp., which objective study also demonstrated as the correcting glasses. These he has continued to wear up to the present time. It is probable that the astigmatism in the first examination may have been produced by nipping the balls between the lids in order to secure a slit between the eyelids and thus to partially exclude the light, strongly reflected from the country roads.

Case III. A. R., aet. 22, clerk, received after prolonged use of hyoscyamine O. D. + 2. ⌒ + .25 c. ax. 90°

O. S. + 2. ⊃ + .75 c. ax. 90°

to relieve his asthenopia. He had also marked esophoria at 6m. The glasses were worn with complete relief for one and a half years. He then returned once more in trouble notwithstanding the fact that his work at the desk had been abandoned for out-of-doors employment, demanding much less exacting work for his eyes. The esophoria had given place to slight exophoria and his glasses no longer afforded normal sharpness of vision. The ophthalmometer showed an overlapping of two steps of the mires in the vertical

meridian. A second mydriatic correction gave the following result in each eye:

O. D. $+2.\ \bigcirc +1.25$ c. ax. 75°

O. S. $+2.50 \bigcirc +1.50$ c. ax. 105°.

Eight years later he again returned with headache and after careful correction received:

O. D. $+2.\ \bigcirc +1.75$ c. ax. 75°. V. = 6/VI.

O. D. $+2.50 \bigcirc +2.25$ c. ax. 105°. V. = 6/VI.

which he is still wearing.

Case IV. Henry F. aet 7, was first seen in September 1899. His mother is a high myope and has been under my care since her early school life. The father, a hard worked clergyman, has low H. As. The boy had severe headaches, eyes watered in the light or after use at near work. The chorioid was honeycombed and there was present an absorption conus, one-third the width of the disc at the temporal side of both nerves. V = 6/xii in each. After prolonged treatment with a mydriatic the total refraction error was corrected by $+1.50 \bigcirc +.50$ c. ax. 90°. The boy was taken from school for a year. Vision was then 6/vii½ in each eye. He has been kept under observation at regular intervals and has borne his school work without harm or discomfort until January, 1903, when his headache and dread of light returned. On examination under hyoscyamine V. rose to 6/V in each eye with $+2.50 \bigcirc +.50$ c. ax. 90° an apparent increase of 1. D in his hypermetropia.

In addition to the class of changes simply illustrated by the examples given, is the large group of patients, usually past middle life, where the axis of the correcting cylinder, usually a low one, sweeps around from an approximately vertical position to the horizontal. Of this I will relate one example. Mr. C. aet. 45, a great sufferer from migraine received $+1.50 \bigcirc +.50$ c. ax. 75° in O. D. and $+2. \bigcirc +.62$ c. ax. 105° for O. S. giving normal acuity of vision. To these were added the required reading segment in the form of bifocal glasses. His asthenopia disappeared for a year or more when he began to suffer occasional recurrences, not relieved by presbyopic corrections. These recurrences growing more frequent and severe, a remeasurement was made, when he selected the same spherical glass but the axis of the cylinders were rotated to 15° and 165°, respectively. A year later the strength of the cylinders required an increase so that at the present time he is wearing

O. D. $+1.50 \bigcirc +1.25$ c. ax. 15°. V. = 6/V.

O. S. $+2.00 \bigcirc +1.00$ c. ax. 165°. V. = 6/V.

This I have seen occur in the presence of increased tension in other cases, indeed this reversal of the cylinder axis I have come to regard with suspicion, but in the case reported there was no demonstrable reason to suspect a threatened glaucoma. The strength of the required cylinder seems to remove the case also from the group of cases where lenticular change could satisfactorily account for it since the total change amounts to 2. D. in each eye. At the first examination both the ophthalmometer and skiascopy demonstrated the correctness of the glasses chosen by the subjective method.

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## IMPLANTATION OF A BALL OF SOLID PARAFFIN TO SECURE A PROMINENT STUMP AFTER ENUCLEATION OF THE EYE.*

BY FRANCIS W. ALTER, M. D.,
TOLEDO, OHIO.
Formerly Resident Surgeon of the New Amsterdam Eye and Ear Hospital, New York City

Aside from the removal of an otherwise dangerous, painful and incurable focus of disease the great desideratum in enucleation of the eye is to provide a prominent actively movable stump upon which the prothesis oculi can be made to make as nearly the same excursions as its fellow in order that the cosmetic effects may thereby be enhanced and the sufferer be given at least this modicum of comfort.

A number of operations have been made having this object in view, prominent among them may be mentioned the operation devised by Mules which consists in making a complete abscission of the cornea with the adjacent zone of sclera followed by a thorough evisceration of the globe and the implantation of a glass ball, when this implantation is successful an ideal stump is secured but unfortunately in a considerable number of cases despite the most careful closure of the wound sooner or later extrusion of the glass bead follows. Instead of imbedding a glass ball in an eviscerated globe, Frost introduces same into Tenon's capsule after an ordinary enucleation, this on the whole in my hands has been retained more often than when implanted in an empty scleral cavity. Claiborne, Suker and others have engrafted a sponge ball after ordinary enucleation, while the immediate results are brilliant the ultimate outcome is disappointing since the graft usually undergoes absorption.

*Read before the Toledo and Lucas County Academy of Medicine, February 5, 1903.

Instead of glass, balls of silver, gold plated silver, bone and filagree have been used, fenestrated aluminum spheres have also been pressed into service, the latter two as well as the sponge graft having been used with the thought that such material (sponge or filagree) or fenestration would catch and encourage the permeation of granulation tissue and thus aid in the permanent enlargement of the stump and the definite retention of the spheres implanted. None of these devices having been entirely successful it occurred to me to use a ball of solid paraffin basing my conclusions on the perfect inocuousness of paraffin when buried in tissue as evidenced in several nasal deformities which have been corrected by me in the past six months and accordingly I operated a total staphylomatous eye by enucleation. After removal of the globe in the ordinary way a ball of paraffin about one-third the size of the eye was implanted in the empty Tenon's capsule, closure of the wound was made by catching the deep tissues with catgut and suturing the conjunctiva with silk using the well known purse-string method. The paraffin was at first sterilized and then put on ice and allowed to cool in the bottle, when ready to use put in a towel and by tapping with a hammer released from the bottle in a piece large enough to carve out several sizes, using the one which seemed most suitable for the case in hand.

No reaction of any note occurred. Cold applications were kept on at stated periods for several days in order to anticipate any undue reaction. The stump healed kindly and is ideal in size and the cosmetic effect is all that is desired. Solid paraffin possesses the following advantages: First—It is non-irritating. Second—It can be effectually sterilized. Third—It is non-absorbable. Fourth—While it is hard it does not possess the degree of rigidity that glass or other similar substances do and hence it ultimately molds itself to a nicety with the empty Tenon's capsule and thus, Fifth—What is most important, extrusion is less apt to occur.

338 SUMMIT STREET.

# A CLINICAL NOTE ON THE TREATMENT OF PANOPHTHALMITIS BY THE METHOD OF VAN MILLIGEN.*

BY WILLIAM ZENTMAYER, M. D.

PHILADELPHIA, PA.

Attending Surgeon Wills Hospital, Ophthalmologist to St. Mary's Hospital.

Any method of procedure which, even though in a small percentage of cases, can so modify or arrest the course of an attack of panophthalmitis, as to secure a useful organ or leave a well shaped though sightless eye, is one which marks an advance in the healing art. Such results have been claimed, and the case to be recorded is confirmatory of this claim, for the method of treatment introduced by the late Prof. Van Milligen and later successfully employed by Rasche. Van Milligen gave to the method the name of Endokulare Galvanakausis. He directed that the edges of the wound be cauterized, after which the wire loop should be introduced into the vitreous, either in an incandescent state or rendered so after introduction and then moved about along the course of the wound. The wire to be inserted to the depth of from 4 to 8 mm., and the cauterization to last from 3 to 4 seconds. He recorded three successful cases. Rasche employed the treatment in three cases. The first was one of gunshot wound of the eyeball. The symptoms were primarily relieved but enucleation was subsequently performed because of the recurrence of the inflammation. A foreign body was found within the vitreous. The second case was one of injury by a rusty nail entering the eye at the sclero-corneal margin. Symptoms of incipient panophthalmitis developed with a yellow reflex from the fundus. The termination was a blind but well formed eye. In the third case, the injury by a kick from a horse, consisted in a rupture of the eyeball. There was protrusion of purulent vitreous. Recovery with V = 5/5.

Roscher, Van Baumler, Eversbusch and others report recoveries from post-operative infection by this treatment.

The history of my own case was as follows: Sallie G., aged 10 years, was brought to Wills Hospital May 3, 1902, because of an injury to the right eye inflicted by a garden implement 5 hours previously.

There was a wound in the ciliary region just below the sclero-corneal margin from which the iris protruded. The child having been etherized the iris was well drawn out and excised. Forty eight hours

*Read before the section on Ophthalmology of the College of Physicians of Philadelphia, February 17, 1902.

later the entire cornea was infiltrated by pus, purulent vitreous extruded from the wound, the conjunctiva was intensely chemosed and the lids greatly swollen. In consultation with Dr. Charles A. Oliver enucleation was first decided upon but later it occurred to me that the case might be a suitable one in which to give the method of Van Milligen a trial and in this Dr. Oliver concurred.

A probe heated to maximum intensity by an alcohol flame was introduced along the course of the wound for a distance of about ½ cm. and the lips of the wound were also cauterized. A Saemisch operation was then performed and the pus evacuated. The lens being found swollen and opaque, was removed. As much idodoform was introduced within the eyeball as could be coaxed in through the corneal wound. Notwithstanding the gravity of the operation at the end of 24 hours the eye looked much improved. There was no relapse, and at the end of four weeks the child left the hospital with an eyeball which had preserved its normal shape. The iris was adherent along the course of the operation wound. Vision equaled light perception. Three months later the patient was brought back to the hospital with blood in the anterior chamber; the mother attributing the condition to a blow. This may have been the case, but a recurrence of the hemorrhage one month later was without assignable external cause. On each occasion the hyphæma rapidly absorbed and recently, five months after the last attack, the eye was still quiet and tension was normal.

The value of the introduction of iodoform into the eyeball in similar conditions has been demonstrated by Haab and others, and the employment of this measure in my case may have contributed to the result obtained. Still I believe that had I had more confidence in "endoculare galvanacvisis," and depended upon this procedure alone, the eye might have recovered with useful vision.

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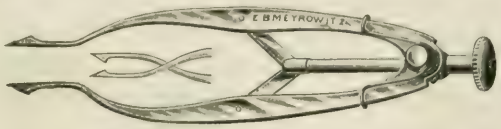
## IMPROVED TENDON TUCKER.

BY FRANK C. TODD, M. D.,
MINNEAPOLIS.
Professor of Clinical Ophthalmology and Otology, University of Minnesota.

Illustrated.

The accompanying illustration represents the writer's improved tendon tucker. There is no change in the principle of the instrument, the prongs are the same as in the former instrument and are used in the same manner in making the tuck; one prong being

entered under the tendon while the prongs are crossed, so that when the prongs are separated the tuck is taken, leaving ample room between the prongs for the insertion of the sutures. The change is in the body of the instrument, and the fact that the screw is



placed where there is more room for it; at the distal end, making the operation of the instrument simpler. This instrument is universal, i. e., can be used on either eye and on the external or internal rectus.

The operation was described in THE OPHTHALMIC RECORD for February, 1902.

This instrument is manufactured by E. B. Meyrowitz, New York City, and Chambers, Inskeep & Co., Chicago.

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## HEMORRHAGE FROM THE EYE AFTER CATARACT EXTRACTION.

BY SWAN W. BURNETT, M. D., PH. D.,
WASHINGTON, D. C.

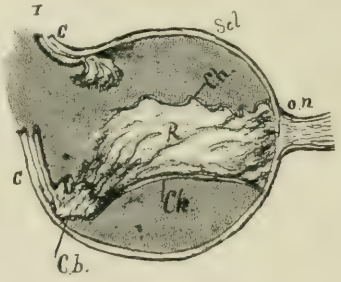
(Illustrated.)

Few surgeons of long experience in cataract extraction, I imagine, have escaped the appalling disaster involving the loss of an eye from hemorrhage occurring within a few hours after the operation. A number of such cases have been placed upon record in the journals(1). The history of all recorded cases are strikingly alike. The operation has usually been smooth and without any serious accident, and the patients have for the most part been fairly good subjects with nothing to lead the operator to expect anything but good results. From one to eight hours after the operation the patient complains of pain in the eye associated with nausea which is often accompanied with vomiting. Soon blood is noticed coming from under the dressing, and on removal of the

(1) Dr. J. A. Spalding gives an abstract in more or less detail of nearly 100 reported cases in *Knapps Archivs.* Vol. XXV., No. 1, 1895. Other cases have been reported in the journals since. It seems curious that Snellen in his treatise on Operations in the new edition of *Gräfe and Sämisch* just out merely makes mention of the catastrophy in some 5 lines. Norris in *Norris and Oliver's System,* gives quite a consideration to the matter.

bandage the corneal wound is found to be widely gaping and filled with blood. The eye, without exception, goes on to enucleation or atrophy. A perfectly satisfactory explanation of these cases has not yet been offered. The patients are not known to be "bleeders" and as the accident occurs as well with the simple as with the combined method of extraction a wounding of the blood vessels must be eliminated at a cause. The act of vomiting cannot be considered as the sole cause, for such cases were not apparently more common in the pre-cocain days when a general anesthetic was used and vomiting was a frequent sequella, than now. Individual idiosyncrasy as expressed in the condition of the vascular walls, would appear to play an important role, if one may judge by the fact that in some instances where the fellow eye has been operated upon with every possible precaution the same result has followed.

A single case of this character having fallen to my lot in which the eye was enucleated on the eighteenth day after the accident. It




may not be without interest to report it together with the result of the examination of the globe: M. O. H., a perfectly healthy white woman of 66 years, was admitted to my clinic at the Emergency Hospital for operation on the 28th of March, 1901. There was a cataract in each eye, that of the left having been mature for some anterior chamber of good depth. Everything seemed favorable for months. The tension was normal and the pupillary reaction good; a good result. Simple extraction of the left lens under cocain was made at 1 P. M. on the 29th. The operation was perfectly smooth the incision lying wholly in the cornea. The iris returned promptly and the pupil was round and central when the bandage was applied. The patient was transported on a ward carriage from the operating room to the ward. No complaint was made until late in the afternoon, when suddenly there was pain in the eye with nausea. At 6 P. M. she vomited after the ingestion of a sup of water. Half an hour later the lower edge of the dressing was seen to be stained with

blood. I was sent for and saw her at 8 P. M. On removal of the bandage the dressing was found saturated with blood. When the lids were opened the corneal wound was seen to be gaping to its fullest extent and filled with a blood-clot. The pain had decreased by this time, but a hypodermic injection of morph. sulph. gr. ¼ was given at once; bandage reapplied. There was another attack of vomiting at 8:30. During the morning of the 30th there were two other attacks of vomiting after ingestion of oatmeal gruel. On removal of bandage the dressing was found to be bloody and the corneal wound still gaping and filled with a clot of blood.

April 1st. No vomiting since last report; blood still oozing from wound; complains of pain in left side of the head. Some chemosis of conjunctiva, but no signs of suppuration; eye cleansed with boric acid solution.

April 3rd. Chemosis not increased; sleeps well. From this time all the acute symptoms subsided, but as there was still some pain, and in order to avoid a long convalescence, enucleation was advised and accepted. This was done on the 16th, 18 days after the extraction. Seven days later she was discharged from the hospital free from pain.

The eye ball was placed in a formalin solution and after proper preparation was imbedded in celloidin and cut at the Lionel laboratory of the Emergency Hospital. The globe was divided into halves antero-posteriorly the section passing through the apex of the corneal incision and the edge of the optic nerve. The macroscopic appearance of one-half is shown in the accompanying figure. It will be seen that the choroid with the retina has separated from the sclera from the attachment of the ciliary muscles back to near the disk. There is nowhere, in any of the sections made, evidence that the hemorrhage passed through the choroid and retina into the vitreous cavity. The retina R is seen lying as a wrinkled mass in the interior, and still adherent to the ciliary body below Cb. Blood occupies all the space between the choroid Ch and sclera Scl pressing close up to the ciliary body below. Above, the blood has evidently broken through the choroid and retina near the ciliary body and forced itself out through the corneal opening carrying the iris I with it and crowding the retina downward. The choroid below lies stretched smoothly against the blood clot, while above it is thrown into folds at its posterior part. The place of rupture was evidently near the ciliary body above which, as is seen, is driven forward towards the opening. A microscopical examination shows

the choroidal vessels to be filled with blood, but nothing could be discovered revealing the exact location of the hemorrhage. The presumption, however, from the appearances, is that it occurred at or near the ciliary body above.

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R. H. Turner, M. D., says (*Therapeutic Gazette*) that at the St. Antoine Maternity in Paris which is under the direction of Dr. Bar, the following treatment of ophthalmia neonatorum is carried out: As a preventive treatment, the genitalia of the mother when she is infected with vaginitis are washed with a solution of permanganate of potash or corrosive sublimate. Immediately after birth, before cutting the cord, the child's lids are carefully wiped with a dry pledget of cotton, and then one to two drops of a 1:150 solution of nitrate of silver is instilled into each eye. The child should not be given a bath, but cleansed with a mixture of equal parts of 90-per-cent alcohol, glycerin, and water.

As a curative treatment the following should be done: Wash out the eye with Kalt's apparatus, using a 1:2000 solution of permanganate of potash. This should be combined with some light cauterizations of nitrate of silver. The unaffected eye should be well protected. Isolate the child completely, and destroy all objects which may be infected. Out of 4,917 children born at the Maternity from March 1, 1897, to July 1, 1901, there were sixty cases of ophthalmia, twenty-four primary and thirty-six secondary, which makes a percentage of 1.22. One-third of these cases were cured in four to five days; in nine cases the disease was more serious, the cornea being affected four times. One was completely cured, two only showed slight specks, and the fourth had almost complete opacity of the cornea.

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The Lancet of March 7th, 1903, has a two page editorial on "The Relation of Dyspepsia to Eye-Strain," which is based on Dr. Gould's great work, Biographic Clinics. An idea of the impression made by this book may be gotten from the following quotation: "It is clear that in every case in which the various symptoms commonly included under the terms chronic dyspepsia and 'biliousness' are present and prove resistant to ordinary treatment, it would be well to obtain the advice and opinion of an ophthalmic surgeon."

THE
# OPHTHALMIC RECORD

A MONTHLY REVIEW OF THE PROGRESS
OF OPHTHALMOLOGY.

VOLUME XII, No. 3. CHICAGO, MARCH, 1903. NEW SERIES.

## REPORTS OF SOCIETIES.

### OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.

Thursday, January 29, 1903.

W. Lang, F. R. C. S., president, in the chair.

Messrs. A. Stanford Morton and J. Herbert Parsons read a paper upon *Hyaline Bodies (Drusenbildungen) at the Optic Disc,* with drawings and notes of two cases and lantern slides.

Out of forty-two cases in the literature seven had retinitis pigmentosa, others were associated with injury, nervous disorders (from simple headache to chronic hydrocephalus and insanity), and chronic interstitial nephritis, but a large number of patients were normal with normal vision. The condition usually commences in early life and is extremely chronic. In nearly all cases both eyes were affected, but often unequally. The prognosis is good. The pathological anatomy of the condition was discussed and various allied conditions demonstrated. It was shown that "Drusen" are not ordinary colloid bodies such as are found upon the choroid though these too may occur near the disc. Exudates similar to the hyaline nodules may become metamorphosed into true bone such as is frequently seen in the choroid in shrunken globes. The fate of exudates in the disc and in other parts of the eye and its dependence upon environment were discussed.

Mr. J. Herbert Parsons read a paper upon *Primary Extradural Tumors of the Optic Nerve with Clinical and Pathological Notes of a case illustrated by lantern slides.* There are eighteen cases on record as compared with 102 cases of primary intradural cases.

The disease usually commences before the age of ten years and the prominent symptom in exophthalmos, the protrusion being most marked in the axis of the orbit. The failure of vision is slow—

slower than with intradural tumors, and is accompanied by optic neuritis of the "choked disc" variety, to be followed by postneuritic atrophy. Later changes in the eye result from lagophthalmos. In no case was the globe invaded by the growth. Eight of the growths were undoubtedly endotheliomata, several having the characteristics of psamomata. The fibromatosis present in most cases is a feature of importance. The growths are slow and of relatively low malignancy, giving rise neither to glandular dissemination nor to metastasis. Considering this fact and that the point of danger is at the apex of the orbit, Kronlein's operation, with retention of the globe is indicated wherever possible.

Dr. Thomas Snowball read a paper on the *Formation of Bone in the Choroid.* Notes were given of a series of seven cases in which ossification had taken place in eyes that had become blind and shrunken as the result of old perforating injuries or long standing inflammation with or without perforation. In the choroid a chronic inflammation with plastic exudation is set up, leading to degenerative changes in the various layers of this coat, the outer pigmented stroma becomes more or less fibrous, the inner layers, the choriocapillaris and membrane of Bruch, are to a large extent replaced by fibrous tissue which has become organized from the exudation poured out towards the inner surface of the choroid. In this fibrous tissue the bone has developed. At the areas of bone formation the choriocapillaris when present is never a continuous layer but is represented by only a few vessels here and there. The lamina vitrea, when seen near the focus of bone, was never found external to it. This is contrary to the observations of Brailey, Fontan and others, who described cases where the membrane of Bruch was seen as a distinct line external to the plate of bone.

In most of his own cases the bone formed a layer in the usual situation, viz., around the optic nerve entrance. In one case where colloid bodies were undergoing ossification, the bone in the choroid had evidently arisen independently of them and was a more advanced stage of development.

In none of the cases was there a trace of sympathetic disease in the other eye.

From a study of his own cases and those described by Knapp, Whiting, Legrange and many others it was concluded that ossification in the choroid arises most commonly in fibrous tissue developing in the choriocapillaris and either replacing it or lying immediately internal to it.

Mr. L. Werner reported two cases of *Tumor of the Optic Nerve* in one of which Kronlein's operation was performed with preservation of the eye, he referred to another also under the care of Mr. Swanzy. The first was a woman aged 43. There had been a swelling of the inner canthus a year before she came under his observation. When seen the left eye was 2 cm. in advance of the right and the eye was pushed downwards. The eye was blind, there was no pulsation or bruit and the optic nerve was atrophied. The diagnosis of tumor of the optic nerve was made and it was removed by Kronlein's operation. The growth did not involve the eye in front, but behind it entered the apex of the orbit and required removing peicemeal. On account of the unsatisfactory condition of the cornea the lids were temporarily united, but they were subsequently opened again. The eye assumed its normal position, though with some impairment of movement. The tumor enclosed in the dural sheath was an alveolar sarcoma, the cells being rather suggestive of its being an endothelioma.

The second was a girl aged 11 whose eye had for 14 months been prominent and divergent. The eye was removed with the growth and the inner aspect of the lid was scraped and the orbit cleared out. This turned out to be a myxosarcoma surrounding the nerve which was entirely degenerated.

Kronlein first performed this operation in 1899. It is not difficult to do and has many advantages over any other. The risks are practically nil and of 70 consecutive cases only one had died. In cases of orbital tumor in which the nerve was not involved the sight might be preserved.

The following card specimens were shown:

Mr. L. Werner. *Coloboma of the Optic Nerve.*

Mr. F. A. C. Tyrrell. *Congenital Malformation of the Lower Lid.*

Major M. T. Yarr. *Changes in the Macular Region following Contusion of the Eye.*

Mr. E. T. Collins. *Case of Favus of the Upper Eyelid.*

Mr. Holmes Spicer. *Sections from Naevus of the Orbit.*

Mr. H. J. Fisher. *Aneurismal Dilatations of the Retinal Vessels in a boy suffering from Heart Disease.*

C. Devereaux Marshall, F. R. C. S.

## SECTION ON OPHTHALMOLOGY—COLLEGE OF PHYSICIANS OF PHILADELPHIA.

Meeting, February 17, 1903. Dr. Samuel D. Risley, chairman, presiding.

Dr. John B. Turner reported the late history of a case of *Poisoning by Jamaica Ginger,* presenting all the symptoms of toxic amblyopia from methyl alcohol. The man had been under treatment, both in Baltimore and this city, before presenting himself at Dr. Risley's Wills' Eye Hospital clinic. His vision was sunk to one-third; there was concentric narrowing of the fields for form, and much uncertainty in distinguishing colors. No improvement followed treatment by strychnine and ascending doses of potassium iodide. Dr. Turner referred to the reputed chemical changes in the system which methyl alcohol undergoes, one of the products being formic acid, and suggested that this was in all probability the toxic agent.

*Discussion.*—Dr. Thorington stated that he examined the man a short time after the appearance of the ocular symptoms, and found marked pallor of the discs, poor vision, and the fields much contracted. Under vigorous treatment by iodides, the fields enlarged, and, when last seen, V. = 6/15. Dr. Posey said that he had seen a similar case in a woman, 77 years old, who had taken large doses of Jamaica ginger daily for some months to relieve pain in the abdomen. At the first examination, °. = 5 12 in each eye. There was some pallor of the optic nerves; form fields normal; the red field slightly contracted, with a relative central scotoma for this color. The use of the ginger was stopped, and she was placed on ascending doses of strychnia. In a month's time, V. = RE. 5/6; LE. 5/7 ½.

Dr. William M. Sweet reported a case of *Injury from a Foreign Body,* and exhibited the eyeball containing a long, narrow piece of steel 14x1.5 mm., which, after passing through the cornea, penetrated the sclera near the posterior pole, 8 mm. of the length being situated inside and 4 mm. outside of the eyeball. The injury occurred while the man was working ship girders with a hydraulic punch. Shortly after the accident he entered the Pennsylvania Hospital, service of Dr. Geo. C. Harlan, and the position of the metal was located by the x-rays. Panophthalmitis necessitated enucleation.

*Discussion.*—Dr. Harlan thought the specimen was interesting as indivating the accuracy of localization by the x-rays and also

in showing the force with which the body struck the eye. One end was slightly thicker than the other, and it was the blunt portion that had penetrated into the orbit. Dr. Zentmayer referred to an injury following a column of air from an air-compression striking the region of the eye, the force with which it was driven causing fracture of the walls of the orbit and extensive emphysema. Dr. Lamb, of Cincinnati, upon invitation to take part in the discussion, cited the case of a fireman who was struck in the eye by a stream of water from a fire hose, resulting in complete disappearance of the eyeball and leaving only the conjunctiva and the muscles. Dr. Risley related the history of an injury from a piece of steel in which removal of the eyeball was found necessary. Arrangements were made to do Mules operation, but, owing to failure of an assistant to secure a glass sphere, enucleation was performed. The steel, instead of being in the eyeball, was found near the optic nerve, lying imbedded among the ciliary nerves. If the Mules operation had been done, and sympathetic inflammation followed, it would have been ascribed as a failure of the Mules procedure to arrest sympathetic irritations. As evidencing the injury which may result to the ocular structures from concussions, he recalled an instance of complete detachment of the retina following the discharge of a gun close to the side of the head. Dr. Posey said that he had seen a case somewhat similar to that reported by Dr. Zentmayer, the injury following an explosion of a gasoline torch. When seen four weeks after injury the ophthalmoscopic examination was negative. The patient said that the eye was quite red for two weeks following the injury. After the inflammation had subsided, he had a severe pain in the eye, which ran back to the occiput. The next morning he noticed a black spot in front of the left eye as large as and shaped like a pear, which persisted the entire day, being seen slightly above the median line. After a night's sleep, free from pain, the scotoma disappeared. A week later, without apparent cause, the pain reappeared at night, and was followed the next day by the appearance of the scotoma, though smaller than before. The field was normal peripherally. V. = 5/15. Dr. Posey thought the scotoma could be explained by an irritation of the fibers of the optic nerve from interference with the circulation at the optic foramen, due, in all probability, to a hemorrhage into the sheath of the nerve, with or without fracture of the orbit. There was some pain at the back of the eye when the patient blew his nose, but no nasal hemorrhage. V. = normal at the end of two weeks.

Drs. J. Norman Risley and H. G. Goldberg (upon invitation) presented the clinical and pathologic report of a case of *Injury from a Piece of Steel*, the metal being located by the x-rays and extracted by the magnet through a scleral opening near the equator. Enucleation was subsequently required. Pathologic examination of the eyeball showed complete detachment of the retina, except at the nerve entrance and at the opening made in the sclera for the extraction of the metal. In view of the recent contention that incisions in the sclera are prone to result in retinal detachment, the pathologic findings in this case are of interest. A second case of much interest was that of sudden onset of pain in a cataractous eye, with high tension and hyphemia. The radial arteries were atheromatous. The diagnosis was hemorrhagic glaucoma. The eyeball was removed, and the pathologic findings showed the presence of a large sarcoma of the choroid.

Dr. S. D. Risley presented a brief paper on *Changes in the Static Refraction of the Eye Without Notable Pathologic Conditions.* He excluded from consideration the eyes, passing over into myopia through the turnstile of astigmatism and progressive myopia, and gave examples of marked changes in the refraction of patients under his own professional care, the determination in every instance being made under the prolonged use of a strong mydriatic. The differences noticed consisted in changes in the amount of astigmatism in hypermetropic eyes and in the direction of the principal meridians, at times amounting to a complete reversal. One case, aged 35, with a simple astigmatism corrected by cyl. + 1.50 D. axis 90°, returned after several years and a second correction with atropia showed sph. + 1.50, which the patient has worn with comfort for fifteen years. All of the reported examples occurred in patients before middle life. The numerous examples of low grades of astigmatism against the rule coming on in patients past 50 years of age were also excluded from consideration. Dr. Risley suggested that such changes were frequent, and argued a broader charity in estimating the value of one's own work and that of his colleagues.

*Discussion.*—Dr. Thorington detailed the history of a woman, aged 68, who had never worn glasses, and only felt the need of them for near work a few months previously. OD., V. = 6/6 partly; with sph. + 0.25 = 6/6 partly. OS., V. = 6/xx; with sph. —1 = 6/6 partly. 2½° of L. H. For near work, sph. + 3 added. Examination 5 years later showed OD., V. = 6/xl; with sph. — 2 = 6/ix. OS., V. + 2/40; with sph. —6 = 6/ix; L. H. 1½°. For

six months past distance vision had rapidly failed, and near vision comfortable without lenses. Examination showed anterior chambers shallow, tension normal, sluggish reacting irides, and beginning opacities in the nucleus of each lens. The urine showed two per cent of sugar, anti-diabetic treatment having been instituted for ten months. Dr. Harlan believed that the changes in the refraction in the case reported by Dr. Thorington were due to swelling of the lenses, which resulted in myopia, and produced the so-called "second sight." The etiology of Dr. Risley's cases was not so readily explained. Dr. Ziegler thought that much of the asthenopic symptoms which appear after lenses have been worn for long periods, are due to changes in the static refraction, and that disturbance of the muscular apparatus may be an important factor in the cause.

Dr. William Zentmayer presented a clinical note on the *Treatment of Panophthalmitis by the Method of Van Milligen.* The patient, a girl 8 years of age, had received a punctured wound in the ciliary region, causing a prolapse of the iris. An iridectomy was made, but in less than 48 hours there developed symptoms of panophthalmitis, with purulent vitreous exuding from the wound. The cautery was introduced along the course of the wound for a distance of ½ cm., and the lips of the cut were also cauterized. A Saemisch operation was performed, and the pus in the corneal tissue and anterior chamber evacuated. The lens, being found opaque and swollen, was removed. As much iodoform was introduced into the eyeball as could be coaxed in through the corneal incision. Nine months later the eyeball still retained its shape; T.n. V. = 1.p.

WILLIAM M. SWEET,
*Clerk of Section.*

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## WILLS' HOSPITAL OPHTHALMIC SOCIETY.

A regular meeting of Wills' Hospital Ophthalmic Society was held at the hospital on the twelfth of January, 1903. Dr. William W. McClure in the chair.

Dr. Frank Fisher presented the history and exhibited a *case of gummata of both orbits* in which the diagnosis was made by exclusion, exploratory incision, and therapy directed towards the dyscrasia. The therapeutic test consisting in the use of mercurial inunctions and tridally doses of one hundred and fifty grains of iodide of potassium for over a period of three months, was followed by complete absorption of the masses.

Dr. William Zentmayer believed that the bilateral character of

the growths with the few remaining indurations situated above the inner canthi, pointed towards an ethmoidal origin. He also stated that as the results of treatment were not marked until about ten weeks after the case was first seen, the rule that six weeks' treatment before operative procedure in undetermined brain cases, might bear exception and probably should be lengthened.

Dr. Charles A. Oliver (through Dr. Homer J. Rhode, the Senior Resident Surgeon of the hospital) presented the clinical history of *a case of gliosarcoma* which had occurred in his clinic, and in which a previous diagnosis of ethmoidal sinusitis had been made and the case operated upon as such at another hospital. Examination of the removed tissues with the microscope at the time of the first visit showed the presence of a tumor-mass which proved itself to be sarcomatous in nature. Later Dr. Oliver operated on the case three times. The eyeball and its adnexa were saved in the first operation, but a recurrence, six weeks later, demanded evisceration preceded by enucleation and exsection of the eyelids. Another return some four weeks after this necessitated an exsection of the orbital masses followed by the local application of forty per cent strength formalin with careful packing; these procedures so far (some two months' time) having given apparent relief. The patient, a female child of six years of age, had been remarkably well and had gained weight and strength since the last operation. Dr. Oliver stated that the patient, as in many of these cases, was very precocious, which condition he considered a bad prognostic sign. He did not have any hope of permanent recovery.

The report of the pathologic findings of the case by Dr. Harold G. Goldberg, the pathologist to the hospital gave an unequivocal diagnosis of small, round-celled sarcoma of the orbit with beginning glioma of the retina.

Dr. Fisher believed that the case was worth watching by reason of the gliomatous involvement of the retina, it having been his experience that the other eye is apt to become involved, and at some time followed by fatal result. Dr. Zentmayer made mention of a case of Dr. Burton K. Chance's in which there had not been any recurrence after a duration of six years.

Dr. Samuel D. Risley (through Dr. Arthur J. Bedell, the Junior Resident Surgeon of the hospital) presented a case of a youth of fourteen years of age who three years previously had been operated upon by Fuchs of Vienna, and in which there had been *recurrences of swellings in the right ethmoidal region.* The case was submitted

for diagnosis, Dr. Risley inclining by reason of the density of the mass, its tardiness of recurrence, and the negative reports as to the condition of the nasal passages, to the belief that the case was one of osteoma of the ethmoid.

Dr. McCluney Radcliffe showed a case of a *growth of the left orbit* in a six year old girl in which proptosis was a prominent symptom, and which in accordance with the history was said to have developed several days after a fall received the day before Christmas. Under ether an exploratory incision was made and a cyst situated posterior to the eyeball was ruptured. The proptosis was immediately less marked after the procedure. The case was being treated expectantly.

In the discussion of the case Dr. William W. McClure stated that it was curious to notice how long such a condition could exist without the family and the friends being aware of it. He also referred to cases of monocular blindness of which the patients themselves had not noticed any loss of sight. He thought that while cysts and other conditions might be of rapid development, yet it was doubtful if this condition had not existed longer than stated. Dr. Rhode stated that Dr. Oliver had from the first believed the case to be one of sarcoma.

Dr. Radcliffe gave the details of the history of *a case of amblyopia* in a thirty year old subject in whom temporary improvement followed large doses of strychnin. There were not any coarse symptoms, while the regular habits of the patient without any history of venereal disease made the case interesting from both its etiologic and therapeutic standpoints.

# NOTES AND NEWS.

ITEMS FOR THIS DEPARTMENT SHOULD BE SENT TO
DR. BROWN PUSEY, 31 WASHINGTON ST., CHICAGO.

The estate of the late Dr. David Little, of Manchester, England, amounts to almost $500,000.

At the University of Cracow, Dr. Majewski has been recognized as privat-docent of ophthalmology.

Dr. W. Uhthoff, professor of ophthalmology in the University of Breslau, will give an address before the section of Ophthalmology of the American Medical Association at New Orleans.

Dr. A. Duane was elected Chairman of the section, and Dr. H. H. Tyson was re-elected Secretary, at the recent annual meeting of the Ophthalmic Section of the New York Academy of Medicine.

Dr. M. Uribe Troncoso of the City of Mexico, Mexico, was recently elected Vice-President of the Mexican Ophthalmological Society and President of the Antonio Alzete Scientific Society.

The Bronx Eye and Ear Infirmary is the name of a new hospital in New York City. It is located at 660 East 142nd St. Drs. C. H. McIlwaine and E. M. Raynor are on the Board of Directors.

In the Boston Medical and Surgical Journal of March 12, 1903, there is a very interesting letter from Dr. George S. Derby on The Study of Ophthalmology in Freiberg. For some time Dr. Derby has been an assistant to Prof. Axenfeld.

At the annual banquet of the ex-resident physicians of the University Hospital, of the University of Pennsylvania, held February

28th, Dr. John Carpenter discussed "The ex-Resident as a Specialist." Dr. Geo. E. de Schweinitz was elected president.

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At the meeting of the Section of Ophthalmology of the College of Physicians of Philadelphia, held January 20th, Dr. S. D. Risley was elected Chairman, and Dr. W. M. Sweet was re-elected Clerk. The Executive Committee consists of Drs. G. C. Harlan, W. C. Posey and W. M. Sweet.

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Mrs. Ann Augusta Thomas, widow of Gen. Samuel Thomas and her children, Edward R. Thomas and Mrs. R. Livingston Beeckman, have given $50,000 to the Manhattan Eye, Ear, and Throat Hospital. It will be used to endow a ward of ten beds, to be known as the "Samuel Thomas Memorial Ward," in the proposed new building.

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The trial of the wood alcohol poisoning case, in the Baltimore Superior Court, resulted in a disagreement of the jury. The jury stood nine for Dr. Brehm, the blind plaintiff, and three for the drug firm. Four other cases are pending, three for blindness and one for death, alleged to have resulted from drinking essence of Jamaica ginger containing wood alcohol.

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The Sixth Annual Report of the Episcopal Eye, Ear and Throat Hospital of Washington, D. C. (for the year 1902) shows that 1880 new eye patients were treated during the year. These patients made 6,814 visits, and on them 313 operations were done. The directors propose building a new hospital and for this a suitable lot, and most of the money necessary, have been contributed.

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The New York Eye and Ear Infirmary, was the scene of a strike on February 28th, on the part of nine graduate nurses. It is stated that the recalcitrant nurses objected to certain changes introduced by a newly appointed assistant to the chief nurse, and after presenting their individual resignations, which the authorities declined to accept, they left in a body. (N. Y. Medical Journal, March 7th, 1903.)

The College of Physicians and Surgeons of New York announce for the summer of 1903 an extensive series of courses in medicine, for the benefit of practicing physicians who desire opportunities for additional study and investigation, as well as for that of properly qualified students of medicine and surgery. Instruction will begin on Monday, June 1st, and will continue until Monday, August 24th. The work in ophthalmology will be under the supervision of Drs. Claybourn, Holden and Tyson.

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*Wood Alcohol in Jamaica Ginger*—According to a report recently made by Dr. J. A. Deghoree, chemist to the Health Department, wood alcohol, instead of ethyl alcohol, was found to have been used in the preparation of Jamaica ginger and spirit of ammonia in 40 out of 215 samples purchased of New York druggists. As a result of this, one arrest has already been made, and proceedings are to be instituted against a considerable number of other pharmacists. (Boston Medical and Surgical Journal, Feb. 26th, 1903.)

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Dr. William H. Wilder will contribute a paper on "The Influence of Resection of the Superior Ganglion of the Cervical Sympathetic in Glaucoma" at the symposium on the influence of the cervical sympathetic nerve on the eye, which will be held in the Ophthalmic Section at the next meeting of the American Medical Association. He proposes making a statistical report, and has sent a circular letter to many ophthalmologists, in which he requests the records of any cases that have not been reported. If this circular has not reached anyone who has had such a case, we would be very glad to have one forwarded.

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The medical inspectors of the schools of Prussia did not find a single school in which less than 5 per cent. of the children were affected with granular lids. In the villages the proportion averaged 20 to 48 per cent., and at one place more than half the children were affected. Raehlmann states that more than half a million persons suffer from trachoma in three provinces alone. The government appropriates every year $87,500 to fight it, but still more energetic measures are demanded by the Berlin medical press. (Journal of the Amer. Med. Ass'n.)

At the meeting of the Medical Society of the County of New York held January 26th, 1903, Trachoma was the principal subject under discussion. The subject was divided among the speakers of the evening, Dr. Frank Van Fleet considering its Clinical History and Treatment; Dr. Arnold H. Knapp, Pathology; Dr. J. Herbert Claiborne, Treatment; Dr. Walter E. Lambert, Present Conditions in New York City; Dr. A. E. Davis, Prophylaxis; Dr. Thomas R. Pooley, Dr. John E. Weeks, Dr. D. H. Wiesener, Dr. W. B. Marple, Dr. Chas. B. Meding, Dr. Herman Jarecky, took part in the general discussion. Abstracts of the papers presented and the discussion may be found in the Medical Record, February 21, 1903.

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The Eighty-Second Annual Report (for the year ending September 30, 1902) of the Board of Directors of the New York Eye and Ear Infirmary, which has just appeared, shows that at that institution the enormous number of 33,789 new eye patients were received during the year. These patients required (excluding the removal of foreign bodies from the cornea of which cases there were a great many) 2,005 operations. In the new building for the care of gonorrhœal ophthalmia, 99 cases were received into the wards; 48 of these patients were adults, 51 were infants of the average age of from four to five weeks. On account of the increased number of cases of trachoma applying for treatment it is proposed to build two wards for the care of such cases.

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*The Biographic Clinics of Dr. Gould.*—"The Medical profession is under many obligations to Dr. George M. Gould, the vigorous editor of *American Medicine*. The last product of his fertile brain and productive pen is the "Biographic Clinics," a book of 233 pages. In writing this wonderful book he has done pioneer work in a most important department of medicine. He has shown conclusively that five of the greatest men in history were the subjects of eye strain, which was responsible for all the agonies that made the busiest and most useful epochs in their lives a constant misery. The analysis of the symptoms related by themselves or their biographers is so logical that no doubt can be left in the mind of the careful reader concerning the correctness of the author's conclusions. There can be no doubt that thousands are affected in a similar manner today, and as any competent oculist can secure the necessary relief,

this class of patients should be reached by the profession. This little book should be in the hands of every physician and teacher, as it treats of a subject of a medical affection, which, when overlooked or neglected, will bring ailments that will make life a constant misery, if not a total failure." N. Senn, in Journal American Medical Association, March 21, 1903.

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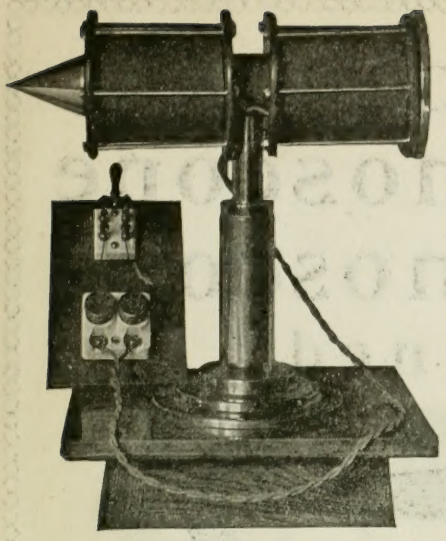

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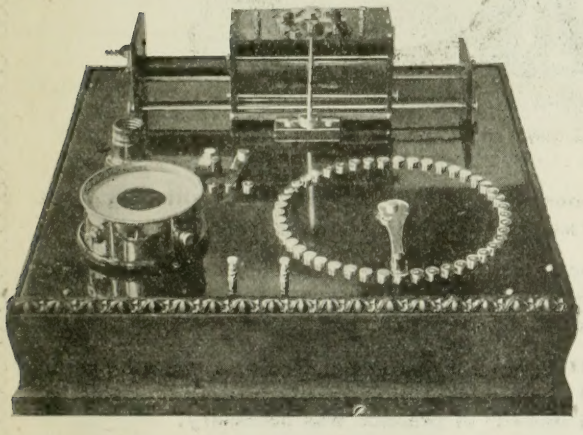

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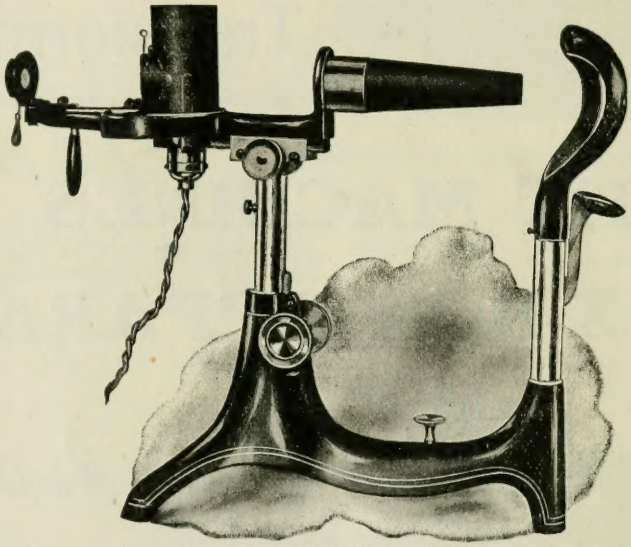

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